UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,621	12/12/2001	Eric J. Horvitz	MS164170.2	5221

7590 04/20/2006	**EXAMINER**
Himanshu S. Amin	SHAW, PELING ANDY
24th Floor, National City Center	

ART UNIT	PAPER NUMBER
2144	

1900 East 9th Street
Cleveland, OH 44114

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

F MAILED 1

APR 2 0 2006

Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 10/021,621
Filing Date: December 12, 2001
Appellant(s): HORVITZ ET AL.

Himanshu S. Amin
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 01/26/2006 appealing from the Office action mailed

09/20/2005.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or

be directly affected by or have a bearing on the decision in the pending appeal is contained in the

brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in

the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal in the

brief is correct, except with corrections to items F and H as "Abu-Hakima (US 6,499,021 B1) "

instead of "Jonathan Isaac Abu-Hakima (US 6,499,021 B1)".

(7) Grouping of Claims

The rejection of claims 1-85 stand or fall together because appellant's brief does not

include a statement that this grouping of claims does not stand or fall together and reasons in

support thereof See 37 CFR 1.192(c)(7).

(8) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Evidence Relied Upon

No evidence is relied upon by the examiner in the rejection of the claims under appeal.

(10) Prior Art of Record

No prior art is relied upon by the examiner in the rejection of the claims under appeal.

Ishmail: Immediate Identification of Important Information	Helfman et al.	1995
CLUES: Dynamic Personalized Message Filtering	Marx	11-1996
Minimizing Information Overload: The Ranking of Electronic Messages	Losee	6-1998
US 6078568 A	Wright, et al.	06-2000
US 6101531 A	Eggleston et al.	08-2000
US 6463462 B1	Smith, et al.	10-2002
US 6499021 B1	Abu-Hakima	12-2002
US 6542868 B1	Badt et al.	04-2003
US 6757362 A	Cooper, et al.	06-2004
US 6781972 B1	Anderlind, et al.	08-2004

(11) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

A. Claims 23-26 and 34-39 are rejected under 35 U.S.C. 102(b) as being anticipated by

Robert M. Losee, Jr. (Minimizing Information Overload: The Ranking of Electronic

Messages), hereinafter referred as Losee.

    a. Regarding claim 23, Losee disclosed a method associated with message delivery,

        comprising: generating a priority associated with a message (abstract);

        determining an expected loss of non-review of the message at a current time

        based at least on the message priority and an expected rate of lost opportunity for

        the user resulting from non-review of the message as a function of time;

        determining an expected cost of outputting the message at the current time; and

        alerting a user of the message in response to determining that the expected loss is

        greater than the expected cost (page 181, left column, last paragraph-page 182,

        right column, 1st paragraph).

    b. Regarding claim 24, Losee disclosed the method of claim 23, the expected loss of

        non-review comprises determining a likelihood that the user will review message

        text at a future time (page 181, left column, last paragraph-page 182, right

        column, 1st paragraph).

    c. Regarding claim 25, Losee disclosed the method of claim 23, the expected loss of

        non-review comprises determining a current expected rate of lost opportunity for

        the user resulting from non-review of the message as a function of time is non-

        linear (page 181, left column, last paragraph-page 182, right column, 1st

        paragraph).

d. Regarding claim 26, Losee disclosed the method of claim 23, wherein the priority

is generated by a classifier configured as at least one of a Bayesian classifier and a

support-vector machine classifier (page 182, left column, 2nd and 3rd

paragraphs).

e. Regarding claim 34, Losee disclosed the method of claim 23, further comprising

determining an expected criticality for the prioritized messages (page 181, left

column, last paragraph-page 182, right column, 1st paragraph).

f. Regarding claim 35, Losee disclosed the method of claim 34, wherein the

expected criticality (EC) is expressed as:

$$EC = \sum_{i} C^d(H_i)p(H_i \mid E^d)$$

wherein C is a cost function that relates to a cost rate at which cost is accrued, d is

a delay, E is an event, and H is a criticality class (page 181, left column, last

paragraph-page 182, right column, 1st paragraph).

g. Regarding claim 36, Losee disclosed the method of claim 34, wherein the

expected criticality is expressed as a function of time (page 181, left column, last

paragraph-page 182, right column, 1st paragraph).

h. Regarding claim 37, Losee disclosed the method of claim 36, an expected loss is

expressed as at least one of:

$$EL = \sum_{i}^{n} p(critical_i)C(critical_i)t; \text{ and}$$

$$EL = \int_0^t p(critical_i)C(critical_i,t)dt$$

wherein EL is an expected loss, p(criticali) is a probability that a message has

criticality i, C(criticali) is a cost function for the message having the criticality i, n

is a total number of criticality classes minus one, and t is the time delay before

reviewing the message (page 181, left column, last paragraph-page 182, right

column, 1st paragraph).

i. Regarding claim 38, Losee disclosed the method of claim 37, the expected loss is

expressed as at least one of:

$$EL'=\sum_j p(t_j|E)\sum_i^n p(critical_i)C(critical_i)\,t_j\;;\text{ and}$$

$$EL'=\sum_j p(t_j|E)\int_0^{t_j} p(critical_i)C(critical_i,t)dt$$

wherein EL is an uncertainty in time of delay, E represents one or more

observations about a user state, and i and j are indexes, i and j being integers

(page 181, left column, last paragraph-page 182, right column, 1st paragraph).

j. Regarding claim 39, Losee disclosed the method of claim 38, E is at least one of a

calendar, a room acoustic, a desktop activity, a time since last touched an active

device (page 181, right column, section 4, first paragraph: schedule, feature).

Losee disclosed all limitations of claims 23-26 and 34-39. Claims 23-26 and 34-39

are rejected under 35 U.S.C. 102(b).

B. Claims 1-10 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Smith, et al., (US 6463462 B1), hereinafter referred as Smith in view of Badt et al. (US

6542868 B1), hereinafter referred as Badt, Anderlind, et al., (US 6781972 B1),

hereinafter referred as Anderlind, Wright, et al., (US 6078568 A), hereinafter referred as
Wright and Cooper, et al., (US 6757362 A), hereinafter referred as Cooper.

a. Smith shows (claim 1) a user interface to manage electronic messages,
comprising: a display providing one or more display objects associated with
delivery of one or more messages, the messages being automatically classified
according to a respective priority value; and one or more inputs associated with
the display objects to facilitate adaptation of the user interface to one or more
preferences of a user (Figs. 4 and 20-22; column 6: line 1-39; column 10, line 57-
60: The message form displays the quantity and type of devices to receive
messages, as obtained from the various collective recipient profiles); (claim 40) a
user interface to manage electronic messages, comprising: means for providing
graphical displays associated with one or more messages that have been
automatically classified according to a priority of the respective messages; and
means for configuring the graphical displays according to one or more user
preferences associated with the priority and delivery of the one or more messages
(Figs. 4, 20-22; column 6: line 1-39; column 10, line 57-60: The message form
displays the quantity and type of devices to receive messages, as obtained from
the various collective recipient profiles). Smith also shows (column 11, line 33-
37) any recipients of system messages that are not profiled will receive e-mail by
default, with a reminder to set up their profile to take full advantage of the
communications, scheduling and priority extensions to enhance their business
productivity. Smith does not show (claim 1) the one or more inputs includes at

least one or more user preferences for assembling a priority value to a voice message based at least in part on acoustical properties of the voice message; (claim 3) the one or more profiles relating to an active profile and a default profile configurable by the user; (claim 6) the delivery options including chunking options, the chunking options comprise at least one of holding and delivering messages until a predetermined time specified by the user, holding and delivering messages until a predetermined number of messages have accumulated, and holding and delivering messages based upon a predetermined inactivity of a computer; (claim 7) the one or more profiles have an associated priority setting such that messages are transmitted based upon a threshold configurable by the user; (claim 8) the priority setting associated with a display object having a slider to adjust the threshold, the threshold having a range from high priority messages sent to all messages sent to a mobile device; (claim 40) the one or more user preferences includes at-least assembling a priority value to a voice message based at least in part on acoustical properties of the voice message.

b. Badt shows (claim 1) the one or more inputs includes at least one or more user preferences for assembling a priority value to a voice message based at least in part on acoustical properties of the voice message (column 4, line 40-60); (claim 40) the one or more user preferences includes at-least assembling a priority value to a voice message based at least in part on acoustical properties of the voice message (column 4, line 40-60) in an analogous art for the purpose of audio notification management system.

c. Anderlind shows (claim 3) active and default profile is configurable by the user

(column 7, line 60-63; column 8, line 21-23) in an analogous art for the purpose

of allowing a mobile station user to select and configure its own profiles for

processing received data message.

d. Wright shows (claim 6) the delivery options including chunking options, the

chunking options comprise at least one of holding and delivering messages until a

predetermined time specified by the user, holding and delivering messages until a

predetermined number of messages have accumulated (column 27, line 26-34:

wait for a predetermined number of data packets to be queued or for an

implementation specific time), and holding and delivering messages based upon a

predetermined inactivity of a computer (column 27, line 26-34: the subscriber

MAC layer is only permitted to add additional data packets to the transmission

queue while in the idle state) in an analogous art for the purpose of transmitting

data packets over radio network using carrier sense multiple access (CSMA).

e. Cooper shows (claim 7) the one or more profiles have an associated priority

setting such that messages are transmitted based upon a threshold configurable by

the user and (claim 8) the priority setting associated with a display object having a

slider to adjust the threshold, the threshold having a range from high priority

messages sent to all messages sent to a mobile device (column 43, line 25-29: To

change the tempo of the VA, the slider dragged to the desired position. For

example, a user would set the tempo to slow when first learning how to use the

VA, and after becoming more familiar with the VA, the tempo could be set to

fast) in an analogous art for the purpose of assigning a tempo threshold for virtual assistant to recognize a command via a user voice input.

f. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Smith's functions of delivering messages and processing message responses with Badt's functions of audio notification management, Anderlind functions of profile management, Wright's functions of delivering e-mails to devices and Cooper's slide adjustment function.

g. The modification would have been obvious because one of ordinary skill in the art would have been motivated to integrate audio notification functions per Badt's teaching, profile management functions per Anderlind and Cooper's teaching and e-mail delivery control per Wright's teaching into a universal message management system per Smith's teaching.

h. Regarding claim 2, Smith shows the one or more display objects including one or more profiles that relate to a time and manner of delivery of the one or more messages (column 6, line 21-23: Upon selection of profile manager 162, the user chooses 172 to create a profile 174 for each priority; column 6, line 31-33: Upon selection of schedule manager 164, the user chooses 178 to add a new schedule 180 by assigning profiles previously created to date formulas; column 6: line 13-15: Upon selection of device manager 160, the user chooses 166 to add and configure new devices 168 for receipt of messaging information sent by the system 10).

i. Regarding claim 4, Smith shows the one or more profiles are associated with one
    or more delivery options for sending the messages to a device (column 6: line 13-
    15: Upon selection of device manager 160, the user chooses 166 to add and
    configure new devices 168 for receipt of messaging information sent by the
    system 10).

j. Regarding claim 5, Smith shows the one or more delivery options including at
    least one of send messages to a mobile device (column 6: line 15-17: These
    include multiple e-mail, voicemail, fax, pager, telephone and wireless
    communication devices), send messages from a folder associated with the mobile
    device (column 6, line 48-52: The media folders process the appropriate
    communications through the media translator 192, creating new message formats
    and addresses based on the recipient information received and messaging devices
    to which the messages are destined), enable prioritized delivery (column 6, line 5-
    7: The user defines message delivery methods according to the message priority,
    device security and time schedule).

k. Regarding claim 9, Smith shows the one or more profiles including at least one of
    a calendar and time setting associated with the one or more display objects
    (column 9, line 18-20: Finally, the recipient selects the "schedules" tab so that the
    recipient can assign the various profiles to dates and times).

l. Regarding claim 10, Smith shows the one or more profiles are associated with at
    least one of work, home, out of office and do not disturb (column 6, line 24-26:

The profile designates locations such as work, home, vacation, travel office, travel

accommodations and other user preferences).

Together Smith, Badt, Anderlind, Wright and Cooper disclosed all limitations of

claims 1-10 and 40. Claims 1-10 and 40 are rejected under 35 U.S.C. 103(a).

C. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Smith, et al., (US 6,463,462 B1), hereinafter referred as Smith in view of Badt et al. (US

6542868 B1), hereinafter referred as Badt and Matthew Marx (CLUES: Dynamic

Personalized Message Filtering), hereinafter referred as Marx.

   a. Smith shows (claim 1) a user interface to manage electronic messages,

       comprising: a display providing one or more display objects associated with

       delivery of one or more messages, the messages being automatically classified

       according to a respective priority value; and one or more inputs associated with

       the display objects to facilitate adaptation of the user interface to one or more

       preferences of a user (Figs. 4 and 20-22; column 6: line 1-39; column 10, line 57-

       60: The message form displays the quantity and type of devices to receive

       messages, as obtained from the various collective recipient profiles). Smith also

       shows (column 9, line 62-67) a response view summarizing response messages.

       Smith does not show (claim 1) the one or more inputs includes at least one or

       more user preferences for assembling a priority value to a voice message based at

       least in part on acoustical properties of the voice message; (claim 11) priority

       learning.

b. Badt shows (claim 1) the one or more inputs includes at least one or more user preferences for assembling a priority value to a voice message based at least in part on acoustical properties of the voice message (column 4, line 40-60) in an analogous art for the purpose of audio notification management system.

c. Marx shows (claim 11) gathering the status information associated with an amount of learning that has been achieved by a priorities system (page 114, left column, last paragraph-right column first paragraph) in an analogous art for the purpose of dynamic personalized message filtering.

d. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to Smith's functions of delivering messages and processing message responses with Badt's functions of audio notification management and Marx's personalized message filtering feature.

e. The modification would have been obvious because one of ordinary skill in the art would have been motivated to integrate audio notification functions per Badt's teaching and a user message examination feedback feature in the priority assignment, including an ability to view the feedback learning status per Marx's teaching into a universal message management system per Smith's teaching.

Together Smith, Badt and Marx disclosed all limitations of claims 1 and 11. Claims 1 and 11 are rejected under 35 U.S.C. 103(a).

D. Claims 1, 12-13 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, et al., (US 6,463,462 B1), hereinafter referred as Smith in view of Badt et al. (US 6542868 B1), hereinafter referred as Badt, Eggleston et al. (US 6101531 A),

hereinafter referred as Eggleston and Wright, et al., (US 6,078,568 A), hereinafter

referred as Wright.

    a. Smith shows (claim 1) a user interface to manage electronic messages,

comprising: a display providing one or more display objects associated with

delivery of one or more messages, the messages being automatically classified

according to a respective priority value; and one or more inputs associated with

the display objects to facilitate adaptation of the user interface to one or more

preferences of a user (Figs. 4 and 20-22; column 6: line 1-39; column 10, line 57-

60: The message form displays the quantity and type of devices to receive

messages, as obtained from the various collective recipient profiles). Smith does

not show (claim 1) the one or more inputs includes at least one or more user

preferences for assembling a priority value to a voice message based at least in

part on acoustical properties of the voice message; (claim 12) the one or more

display objects selectable to send a summary of information to a device associated

with the one or more messages; (claim 13) the one or more display objects

including a reset of the amount of messages sent to the device; (claim 20) the one

or more device options further comprising a selectable compression setting to

control the amount of information displayed; (claim 21) the one or more device

options further comprising limiting a number of messages sent, limiting the

number of characters in the messages, and automatically resetting the number of

messages sent.

b. Badt shows (claim 1) the one or more inputs includes at least one or more user preferences for assembling a priority value to a voice message based at least in part on acoustical properties of the voice message (column 4, line 40-60) in an analogous art for the purpose of audio notification management system.

c. Eggleston shows (claim 12) the one or more display objects selectable to send a summary of information to a device associated with the one or more messages (column 3, line 21-39); (claim 20) the one or more device options further comprising a selectable compression setting to control the amount of information displayed (column 11, line 67-column 12, line 7) in an analogous art for the purpose of sending messages to a wireless client.

d. Wright shows (claim 13) the one or more display objects including a reset of the amount of messages sent to the device (column 27, line 26-34: Prior to exiting from the idle state (1), the subscriber MAC layer shall set a state variable of the No.sub.-- Tx.sub.-- Attempts to zero); (claim 21) the one or more device options further comprising limiting a number of messages sent (column 13, line 13-18), limiting the number of characters in the messages (column 10, line 2-6), and automatically resetting the number of messages sent in an analogous art for the purpose of transmitting data packets over radio network using carrier sense multiple access (CSMA).

e. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Smith's functions of delivering messages and processing message responses with Badt's functions of audio notification

management, Eggleston's functions of sending message summary and

compressing message, and Wright's functions of delivering e-mails to devices.

f. The modification would have been obvious because one of ordinary skill in the art

would have been motivated to integrate audio notification functions per Badt's

teaching, selection of message to be viewed on a device and compression of

message for delivery over a low bandwidth device per Eggleston's teaching, e-

mail delivery control per Wright's teaching into a universal message management

system per Smith's teaching.

g. Regarding claim 19, Smith shows further comprising one or more device options

relating to how messages are displayed on a device (column 6, line 42-44).

h. Regarding claim 22, Smith shows the one or more device options further

comprising configuring display information relating to a sender of the messages

(column 2, line 28-35).

Together Smith, Badt, Eggleston and Wright disclosed all limitations of claims 1, 12-

13 and 19-22. Claims 1, 12-13 and 19-22 are rejected under 35 U.S.C. 103(a).

E. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Smith, et al., (US 6,463,462 B1), hereinafter referred as Smith in view of Badt et al. (US

6542868 B1), hereinafter referred as Badt and Jonathan Isaac Helfman et al. (Ishmail:

Immediate Identification of Important Information), hereinafter referred as Helfman.

a. Smith shows (claim 1) a user interface to manage electronic messages,

comprising: a display providing one or more display objects associated with

delivery of one or more messages, the messages being automatically classified

according to a respective priority value; and one or more inputs associated with

the display objects to facilitate adaptation of the user interface to one or more

preferences of a user (Figs. 4 and 20-22; column 6: line 1-39; column 10, line 57-

60: The message form displays the quantity and type of devices to receive

messages, as obtained from the various collective recipient profiles). Smith also

shows (column 9, line 62-67) a response view summarizing response messages.

Smith does not show (claim 1) the one or more inputs includes at least one or

more user preferences for assembling a priority value to a voice message based at

least in part on acoustical properties of the voice message; (claim 14) the one or

more display objects comprising one or more rules configurable by the user to

effect delivery of the messages to a device, the one or more rules including

selection options of at least one of sending messages based on importance,

sending messages based on the user's name and a TO field, sending messages

based on the user's name and a CC field, and sending messages based on a source

of the message.

b. Badt shows (claim 1) the one or more inputs includes at least one or more user

preferences for assembling a priority value to a voice message based at least in

part on acoustical properties of the voice message (column 4, line 40-60) in an

analogous art for the purpose of audio notification management system.

c. Helfman shows (claim 14) the one or more display objects comprising one or

more rules configurable by the user to effect delivery of the messages to a device

(page 5, right column, paragraph 5; page 2, left column, 3rd paragraph), the one

or more rules including selection options of at least one of sending messages

based on importance, sending messages based on the user's name and a TO field

(page 6, left column, 3rd paragraph), sending messages based on the user's name

and a CC field (page 6, left column, 3rd paragraph), and sending messages based

on a source of the message (page 6, left column, 3rd paragraph) in an analogous

art for the purpose of identifying important messages.

d. It would have been obvious to a person of ordinary skill in the art at the time of

the invention was made to Smith's functions of delivering messages and

processing message responses with Badt's functions of audio notification

management and Helfman's functions of setting rule in delivering specific

messages to a specific device.

e. The modification would have been obvious because one of ordinary skill in the art

would have been motivated to integrate audio notification functions per Badt's

teaching and the filtering of message delivery to a specific device (location) based

upon the role, identification and origination of message per Helfman's teaching

into a universal message management system per Smith's teaching.

Together Smith, Badt and Helfman disclosed all limitations of claims 1 and 14.

Claims 1 and 14 are rejected under 35 U.S.C. 103(a).

F. Claims 1 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Smith, et al., (US 6,463,462 B1), hereinafter referred as Smith in view of Badt et al. (US

6542868 B1), hereinafter referred as Badt and Abu-Hakima (US 6499021 B1),

hereinafter referred as Abu-Hakima.

a. As per paragraph 4, item a, Smith shows (claim 1) a user interface to manage

    electronic messages, comprising: a display providing one or more display objects

    associated with delivery of one or more messages, the messages being

    automatically classified according to a respective priority value; and one or more

    inputs associated with the display objects to facilitate adaptation of the user

    interface to one or more preferences of a user (Figs. 4 and 20-22; column 6: line

    1-39; column 10, line 57-60: The message form displays the quantity and type of

    devices to receive messages, as obtained from the various collective recipient

    profiles). Smith does not show (claim 1) the one or more inputs includes at least

    one or more user preferences for assembling a priority value to a voice message

    based at least in part on acoustical properties of the voice message; (claim 15)

    further comprising providing feedback to the user via the one or more display

    objects regarding learning associated with a priorities system; (claim 16) the

    feedback includes information relating to learning when messages are deleted by

    the user; (claim 17) the feedback includes information relating to where messages

    are learned from and (claim 18)further comprising at least one of back-up, restore,

    and reset options regarding the learning.

b. Badt shows (claim 1) the one or more inputs includes at least one or more user

    preferences for assembling a priority value to a voice message based at least in

    part on acoustical properties of the voice message (column 4, line 40-60) in an

    analogous art for the purpose of audio notification management system.

    c. Abu-Hakima shows (claim 15) further comprising providing feedback to the user via the one or more display objects regarding learning associated with a priorities system (column 11, line 19-25); (claim 16) the feedback includes information relating to learning when messages are deleted by the user (column 10, line 24-40); (claim 17) the feedback includes information relating to where messages are learned from (column 10, line 41-46) and (claim 18) further comprising at least one of back-up, restore, and reset options regarding the learning (column 10, line41-64) in an analogous art for the purpose of intelligently managing electronic messages.

    d. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine Smith's functions of delivering messages and processing message responses with Badt's functions of audio notification management and Abu-Hakima's functions of automatic user knowledge and behavior learning system.

    e. The modification would have been obvious because one of ordinary skill in the art would have been motivated to integrate audio notification functions per Badt's teaching, the automatic user knowledge and behavior learning functions per Abu-Hakima's teaching into a universal message management system per Smith's teaching consider.

Together Smith, Badt and Abu-Hakima disclosed all limitations of claims 1 and 15-18. Claims 1 and 15-18 are rejected under 35 U.S.C. 103(a).

G. Claims 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robert

M. Losee, Jr. (Minimizing Information Overload: The Ranking of Electronic Messages),

hereinafter referred as Losee, as applied to claim 23 above, and further in view of

Eggleston et al. (US 6101531 A), hereinafter referred as Eggleston.

   a. As quoted from paragraph 5, item a, Losee shows (claim 23) a method associated

      with message delivery, comprising: generating a priority associated with a

      message (abstract); determining an expected loss of non-review of the message at

      a current time based at least on the message priority and an expected rate of lost

      opportunity for the user resulting from non-review of the message as a function of

      time; determining an expected cost of outputting the message at the current time;

      and alerting a user of the message in response to determining that the expected

      loss is greater than the expected cost (page 181, left column, last paragraph-page

      182, right column, 1st paragraph). Losee does not show (claim 27) further

      comprising providing a current profile selected from one of a plurality of profiles,

      at least a portion of the plurality of profiles editable by the user to reflect a

      different context; (claim 28) the plurality of profiles is schedulable on a per-day

      and by-time basis; (claim 29) the plurality of profiles provides a chunk setting

      such that the message is delivered to a communications modality in conjunction

      with one or more other messages; (claim 30) the plurality of profiles provides a

      chunk setting such that the message is delivered to a communications modality

      when a specified period has expired; (claim 31) further comprising, prior to

      alerting the user, formatting the message; (claim 32) the formatting comprises

compressing the message; (claim 33) the formatting comprises fragmenting the message.

b. Eggleston shows (claim 27) further comprising providing a current profile selected from one of a plurality of profiles, at least a portion of the plurality of profiles editable by the user to reflect a different context (column 5, line 49-54; column 8, line 23-26); (claim 28) the plurality of profiles is schedulable on a per-day and by-time basis (column 9, line 48-51); (claim 29) the plurality of profiles provides a chunk setting such that the message is delivered to a communications modality in conjunction with one or more other messages (column 6, line 66-column 7, line 3); (claim 30) the plurality of profiles provides a chunk setting such that the message is delivered to a communications modality when a specified period has expired (column 7, line 28-37); (claim 31) further comprising, prior to alerting the user, formatting the message (column 11, line 67-column 12, line 7); (claim 32) the formatting comprises compressing the message (column 11, line 67-column 12, line 7); (claim 33) the formatting comprises fragmenting the message (column 7, line 8-13: packetized) in an analogous art for the purpose of sending messages to a wireless client.

c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add Eggleston's communication server functions, message formatting, compressing and packetization functions into Loose's Message Presentation System after the messages is ranked and alert is generated per claim 23.

    d. The modification would have been obvious because one of ordinary skill in the art

would have been motivated to combine user-definable message filtering profile

functions, message formatting and compression functions in packet data network

together with email prioritization and management functions.

Together Losee and Eggleston disclosed all limitations of claims 27-33. Claims 27-33

are rejected under 35 U.S.C. 103(a).

H. Claims 41-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juha

Takkinen (CAFE: A Conceptual Model for Managing Information in Electronic Mail),

hereinafter referred as Takkinen in view of Badt et al. (US 6542868 B1), hereinafter

referred as Badt and Abu-Hakima (US 6499021 B1), hereinafter referred as Abu-Hakima.

    a. Takkinen shows (claim 41) a method for delivering messages to a device,

comprising: scheduling a period when one or more user profiles are activated

(page 47, section 3: CAFE, busy, cool and curious modes); configuring at least

one set of parameters for the one or more profiles (page 47, right column, line 41-

45; page 52, section 6, 1st paragraph); assigning priority values to one or more

messages (page 48, left column, 2nd paragraph: busy mode); and delivering the

one or more messages based at least in part on the priority values, the profile that

is activated, and the at least one set of parameters (page 47, section 3: CAFE,

busy, cool and curious modes). Takkinen does not show (claim 41) wherein a

voice message is assigned a priority value based at least in part on acoustical

properties of the voice message; (claim 52) further comprising automatically

calling the user if the priority value is above a predetermined threshold; (claim

53) further comprising converting audio messages into text and (claim 54) further

comprising determining a priority for the messages based upon at least one of the

pitch, rate, content, and inflection of the messages.

b. Badt shows (claim 41) wherein a voice message is assigned a priority value based

at least in part on acoustical properties of the voice message (column 4, line 40-

60) in an analogous art for the purpose of audio notification management system.

c. Abu-Hakima shows (claim 52) further comprising automatically calling the user if

the priority value is above a predetermined threshold (column 7, line 12-17);

(claim 53) further comprising converting audio messages into text (column 9, line

40-65) and (claim 54) further comprising determining a priority for the messages

based upon at least one of the pitch, rate, content, and inflection of the messages

(column 9, line 40-65) in an analogous art for the purpose of intelligently

managing electronic messages.

d. It would have been obvious to a person of ordinary skill in the art at the time of

the invention was made to modify Takkinen's functions of managing information

in electronic mail with Badt's functions of audio notification management and

Abu-Hakima's functions of message forwarding and e-message media conversion

agent.

e. The modification would have been obvious because one of ordinary skill in the art

would have been motivated to integrate audio notification and voice mail

functions per Badt and Abu-Hakima's teaching into electronic mail management

system per Takkinen's teaching.

f. Regarding claim 42, Takkinen shows further comprising assigning at least one of

   a color and a sound to indicate the priority of the messages (page 45, section 2.2;

   page 46, section 2.3).

g. Regarding claim 43, Takkinen shows further comprising deferring messages until

   a more convenient time established by the user (page 52, section 6, 1st paragraph:

   calendar).

h. Regarding claim 44, Takkinen shows further comprising providing status

   information relating to why a message is of a determined priority (page 48, left

   column, 2nd and 4th paragraphs: busy and curious modes).

i. Regarding claim 45, Takkinen shows further comprising observing a previous

   history of activity and providing feedback as to a message delivery volume based

   upon the history (page 48, left column, 2nd and 4th paragraphs: curious modes;

   page 51, section 5, 3rd paragraph).

j. Regarding claim 46, Takkinen shows further comprising employing an

   information agent to consider restrictions from other parties before delivering the

   one or more messages (page 47, left column, line 20-24).

k. Regarding claim 47, Takkinen shows further comprising activating one or more

   rules that operate to influence when messages are sent to a user (page 47, left

   column, 3rd and 6th paragraphs, page 50, section 41, 1st paragraph, page 51,

   section 5, 3rd paragraph).

l. Regarding claim 48, Takkinen shows the one or more rules include an if and then

   construct such that if an event occurs then a message is automatically assigned a

predetermined priority (page 47, left column, 6th paragraphs: groupware, group schedule).

m. Regarding claim 49, Takkinen shows the one or more rules include an if and then construct such that if an event occurs then a priority value of a learning process is disclosed (page 46, left column, 1st paragraph; page 49, left column, last paragraph-right column, 1st and 2nd paragraph; page 51, left column, section 5, 3rd paragraph).

n. Regarding claim 50, Takkinen shows the one or more rules include an if and then construct such that if a message is received from a selected communications channel, then a message is automatically assigned a predetermined priority (page 47, left column, 6th and last paragraphs: route, print, and phone message; page 51, left column, 2nd paragraph: voice).

o. Regarding claim 51, Takkinen shows further comprising automatically reviewing messages by an order determined by the priority value (page 47, left column, 2nd, 6th and last paragraphs).

Together Takkinen, Badt and Abu-Hakima disclosed all limitations of claims 41-54. Claims 41-54 are rejected under 35 U.S.C. 103(a).

I. Claims 55-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonathan Isaac Abu-Hakima (US 6499021 B1), hereinafter referred as Abu-Hakima in view of Badt et al. (US 6542868 B1), hereinafter referred as Badt, Wright, et al., (US 6,078,568 A), hereinafter referred as Wright and Eggleston et al. (US 6101531 A), hereinafter referred as Eggleston.

a. Abu-Hakima shows (claim 55) a user interface for an adaptive prioritization and

routing system, comprising: one or more controls and displays to at least one of

acquire user preferences, inspect behavior, and guide learning and decision

policies of the adaptive prioritization and routing system (column 8, line 36-48;

column 9, line 15-39); and a user interface associated with the one or more

controls and displays that facilitates inspection, control and learning associated

with alerting and routing prioritized messages (column 9, line 15-39; column 11,

line 19-25); (claim 78) a user interface for an adaptive prioritization and routing

system, comprising: one or more controls and displays to acquire message priority

settings associated with the adaptive prioritization and routing system (column 8,

line 36-48; column 9, line 15-39); and a user interface associated with the one or

more controls and displays that provides at least one of an adjustable control of an

amount of messages received via the message priority settings and a feedback

directed to the user relating to the settings (column 8, line 36-48; column 9, line

15-39; column 11, line 19-25). Abu-Hakima does not show (claim 55) wherein a

voice message is assigned a priority based at least in part on acoustical properties

of the voice message; (claim 65) the chunking options include grouping M

messages, M being an integer, the M messages are held as a group before delivery

of the messages to the user; (claim 72) further comprising a threshold adjustment

that is employed as a bound on the total dollars allotted for forwarding messages

to a user; (claim 73) the user specifies that a system sends the most urgent

messages, but at a certain cost per message by a routing company, adjust the

threshold so that it would expect to stay within a certain cost per day; (claim 78) including setting priority of the voice message based at least in part on acoustical properties of the voice messages.

b. Badt shows (claim 55) wherein a voice message is assigned a priority based at least in part on acoustical properties of the voice message (column 4, line 40-60); (claim 78) including setting priority of the voice message based at least in part on acoustical properties of the voice messages (column 4, line 40-60) in an analogous art for the purpose of audio notification management system.

c. Wright shows (claim 65) the chunking options include grouping M messages, M being an integer, the M messages are held as a group before delivery of the messages to the user (column 27, line 26-34: wait for a predetermined number of data packets to be queued or for an implementation specific time) in an analogous art for transmitting data packets over radio network using carrier sense multiple access (CSMA).

d. Eggleston shows (claim 72) further comprising a threshold adjustment that is employed as a bound on the total dollars allotted for forwarding messages to a user (column 3, line 62-67); (claim 73) the user specifies that a system sends the most urgent messages, but at a certain cost per message by a routing company, adjust the threshold so that it would expect to stay within a certain cost per day (column 3, line 62-67) in an analogous art for transmitting data packets over radio network.

e. It would have been obvious to a person of ordinary skill in the art at the time of
the invention was made to modify Abu-Hakima's functions of interpreting and
managing electronic messages with Badt's functions of audio notification
management, Wright's functions of packet transmitting and Eggleston's functions
of message usage control.

f. The modification would have been obvious because one of ordinary skill in the art
would have been motivated to integrate audio notification functions per Badt's
teaching, scheduling the message delivery to a device, e.g. mobile or across LAN,
according to device's access control capability, including holding a number of
messages to be delivered once per Wright's teaching and usage and charge control
function per Eggleston's teaching into electronic mail management system per
Abu-Hakima's teaching.

g. Regarding claim 56, Abu-Hakima shows further comprising a plurality of
parameters that are configured in conjunction with various configuration and
adjustment options to facilitate personalization of the user interface (column 8,
line 36-48; column 9, line 15-39).

h. Regarding claim 57, Abu-Hakima shows the personalization includes at least one
of employing explicit and implicit user feedback relating to how messages are
classified and subsequently provided to the user (column 8, line 49-56).

i. Regarding claim 58, Abu-Hakima shows the feedback is employed to guide
learning and decision policies in the adaptive prioritization and routing system
(column 11, line 19-25).

j. Regarding claim 59, Abu-Hakima shows the feedback includes dialog that is
    provided to users to further refine at least one of learning and decision policies in
    the adaptive prioritization and routing system (column 11, line 19-25).

k. Regarding claim 60, Abu-Hakima shows the explicit feedback includes such
    actions as configuring the user interface to consider a selection of messages as
    being more important than another selection of messages and altering learning
    about how decisions are made regarding message urgency (column 4, line 14-26;
    column 11, line 19-25).

l. Regarding claim 61, Abu-Hakima shows the implicit feedback includes
    monitoring various context aspects of the user to determine message importance
    (column 10, line 41-47).

m. Regarding claim 62, Abu-Hakima shows the implicit feedback includes at least
    one of monitoring sounds, keyboard activities, presence detectors, pauses when
    reviewing messages, how quickly messages are opened and deleted, and whether
    messages are saved, copied and forwarded (column 6, line 38-41; column 10, line
    50-63; column 10, line 24-30).

n. Regarding claim 63, Abu-Hakima shows the feedback includes directing
    messages to the user regarding learning decisions such as at least one of "You are
    about to delete messages that have not yet been employed in the learning
    process," and messages relating to how and why messages were classified a
    certain priority (column 10, line 24-40; column 11, line 19-25).

o.   Regarding claim 64, Abu-Hakima shows further comprising one or more
     configuration and adjustment options that include at least one of profile options,
     routing options, alerting options, chunking options, schedule options, and context-
     sensitive control options (column 8, line 36-48).

p.   Regarding claim 66, Abu-Hakima shows further comprising one or more rules
     that act in conjunction with a routing system, learning status and configuration
     options for guiding and inspecting the state of learning of a message urgency
     system (column 5, line 35-57).

q.   Regarding claim 67, Abu-Hakima shows the one or more rules including
     conditions that are applied in at least one of a disjunctive and a conjunctive
     manner (column 5, line 35-57).

r.   Regarding claim 68, Abu-Hakima shows further comprising one or more device
     option configurations for controlling message output to a selected message
     reception and display device (column 8, line 36-48; page 9, line 39-65).

s.   Regarding claim 69, shows further comprising prioritized messages having
     acoustical properties including at least one of prosadic features, temporal patterns
     of rate, pitch, inflections, and an overall energy associated with voice messages
     (column 9, line 40-65).

t.   Regarding claim 70, Abu-Hakima shows further comprising a priority threshold
     adjustment that facilitates control of how many messages are sent to a users
     device (column 8, line 36-48).

u. Regarding claim 71, Abu-Hakima shows further comprising an overlay adjustment that limits the number of messages sent to the users device per a given timeframe (column 8, line 36-48).

v. Regarding claim 74, Abu-Hakima shows further comprising one or more deferral policies that are given as bounds such that a message of a particular urgency will not wait more than at least one of a predetermined and dynamically computed upper limit of time (page 7, line 25-64).

w. Regarding claim 75, Abu-Hakima shows the policies are at least in part based on a function of the message urgency (page 7, line 25-64).

x. Regarding claim 76, Abu-Hakima shows a user specifies at least one of that a message of high urgency should be transmitted with an alert to one or more active devices as soon as possible and to be available for review if the user happens to inspect messages that are waiting (page 7, line 25-64).

y. Regarding claim 77, Abu-Hakima shows further comprising a policy that if the user is more than a specified level of non-interruptability and the message has not been observed, then wait a predetermined time before alerting the user (page 7, line 25-58).

z. Regarding claim 79, Abu-Hakima shows the feedback includes at least one of a quantity of alerts and messages that would have been transmitted to the user per at least one of a time and within a specified bound in time (page 7, line 25-64; column 9, line 15-39; column 11, line 19-25).

aa. Regarding claim 80, Abu-Hakima shows further comprising monitoring user

actions for each of several different routing parameters based upon a threshold on

importance required to send a message beyond the parameters that were employed

(column 10, line 13-23).

bb. Regarding claim 81, Abu-Hakima shows further comprising a user display

including at least one of what would have happened had the settings been

changed, and a display for a set of thresholds along a continual scale thresholds

(column 8, line 36-48; column 9, line 15-39).

cc. Regarding claim 82, Abu-Hakima shows the feedback further comprising

previously tracked numbers of messages that would have been received at

different simulated values of the threshold (column 10, line 41-63).

dd. Regarding claim 83, Abu-Hakima shows further comprising providing feedback

over at least one of a day, week, and month that is displayed at respective settings

so as to be reviewed by users as guides to roughly predict future behavior of the

adaptive prioritization and routing system for potential settings of the threshold

(column 8, line 49-56).

ee. Regarding claim 84, Abu-Hakima shows further comprising employing recent

history as a predictor of the future (column 10, line 41-63).

ff. Regarding claim 85, Abu-Hakima shows further comprising advanced simulations

that are employed to perform "what-if" analyses for at least one of different

settings, parameters and policies, such that new settings can be based on an

expected number of alerts per given timeframe at different settings (column 8,

line 49-56).

Together Abu-Hakima, Badt, Wright and Eggleston disclosed all limitations of claims

55-85. Claims 55-85 are rejected under 35 U.S.C. 103(a).

(12)   Response to Argument

A. In response to Appellant's Argument on rejection of claims 23-26 and 34-39 under 35

U.S.C. 102(b) that Losee fails to disclose that the expected cost is based on non-review as

a function of time:

   a. Losee disclosed (abstract) ranking message by expected importance or economic

      worth.

   b. Losee disclosed (page 181, left column, last paragraph-page 182, right column,

      1st paragraph) if a message should be selected for examination if and only if the

      expected cost of selection for examination is less than the expected cost of non-

      selection for examination. Losee further disclosed a statistics formulation of

      making decision based upon the expected cost of selecting and not selecting

      including probability (likelihood) of not selecting and would review and causing

      loss (expected cost of not review)

   c. Losee disclosed (page 182, left column, 2nd and 3rd paragraphs) using Bayesian

      method in ranking message with feature (m).

   d. It is well known that Bayesian method can be used in discrete and non-discrete

      modeling, e.g. time based, as most mathematical calculation could be expressed in

      discrete and non-discrete, i.e. discrete mathematics and calculus. See a legacy

statistics text boot by Lehmann (Testing Statistical Hypotheses, 1971, a Wiley

publication in mathematical statistics), pages 12-13. Calculation formula 13

describing an integral calculation based on the both probability density and loss as

functions of random variable. This random variable is of the real nature as the

integral calculation depicting. As time is also of real nature. Thus the calculation

applies time based functions.

e. Also from Wikipedia, "Expected Loss" is shown based on a non-discrete

calculation as in applicant's recited claim a function of time.

f. Losee certainly does not distinguish the discrete and non-discrete calculation.

However, Losee disclosed the expected loss calculation as a summation of

(probability of loss times loss).

g. It is well known that probability expression typically would expand from discrete

expression to non-discrete as Wikipedia's suggested.

h. Additional reference is Love (US 6920439), column 10, lines 49-62. Love shows

that expected value of performing test T is based on T as a state (index) or

determined by assigning a priori (i.e. probability density function for non-discrete

statistical calculation) and updating it with the observed frequencies of the

training data, i.e. sampling of testing. This is to say the calculation of expectation

could be either discrete or non-discrete.

i. Thus an expected loss calculation is shown in the legacy decision theory as

statistical estimation, i.e. a statistical mean of function. It uses both discrete

(mathematical summation) and non-discrete calculation (integration).

In response to Appellant's Argument on rejection of claims 1-10 and 40 under 35

U.S.C. 103(a):

B. In response to Appellant's Argument on rejection of claims 1-10 and 40 under 35

U.S.C. 103(a) that Stnith et al. fails to teach assigning a priority value based on acoustical

properties of the voice message and Badt et al also fails to teach or suggest this novel

feature.

    a. Badt is brought in combinatory with Smith to show assigning priority to voice

        messages.

    b. Badt disclosed (column 4, lines 40-60) assigning priority to voice mail for

        notification. A voice recognition application is used to analyze the voice mail

        message to determine the identity of the speaker (of voice mail). The notification

        is hen assigned a priority level based upon the speaker's level in the organization.

        The voice recognition application certainly needs to utilize the acoustical

        properties to determine the identity of the speaker. Then the priority is assigned.

    c. Together Thus Badt and Smith would have all the limitations of claim 1 as cited

        in the final action.

C. In response to Appellant's Argument on rejection of claims 1 and 11 under 35

U.S.C. 103(a):

    a. As applicant applies the same argument here as in previous argument on rejection

        of claims 1-10 and 40 under 35 U.S.C. 103(a), the same response in item B above

        would apply.

D. In response to Appellant's Argument on rejection of claims 1, 12-13 and 19-22 under 35 U.S.C. 103(a):

   a. As applicant applies the same argument here as in previous argument on rejection of claims 1-10 and 40 under 35 U.S.C. 103(a), the same response in item B above would apply.

E. In response to Appellant's Argument on rejection of claims 1 and 14 under 35 U.S.C. 103(a):

   a. As applicant applies the same argument here as in previous argument on rejection of claims 1-10 and 40 under 35 U.S.C. 103(a), the same response in item B above would apply.

F. In response to Appellant's Argument on rejection of claims 1 and 15-18 under 35 U.S.C. 103(a):

   a. As applicant applies the same argument here as in previous argument on rejection of claims 1-10 and 40 under 35 U.S.C. 103(a), the same response in item B above would apply.

G. In response to Appellant's Argument on rejection of claims 27-33 under 35 U.S.C. 103(a):

   a. As applicant points out the rejection here depends upon the rejection of claims 23-26 and 34-39 under 35 U.S.C. 102(b), the same argument applies. The above response in item A to the rejection of claims 23-26 and 34-39 under 35 U.S.C. 102(b) is applied here.

H. In response to Appellant's Argument on rejection of claims 41-54 under 35

U.S.C. 103(a):

    a. As applicant applies the same argument here as in previous argument on rejection

       of claims 1-10 and 40 under 35 U.S.C. 103(a), the same response in item B above

       would apply.

I. In response to Appellant's Argument on rejection of claims 55-85 under 35

U.S.C. 103(a):

    a. As applicant applies the same argument here as in previous argument on rejection

       of claims 1-10 and 40 under 35 U.S.C. 103(a), the same response in item B above

       would apply.

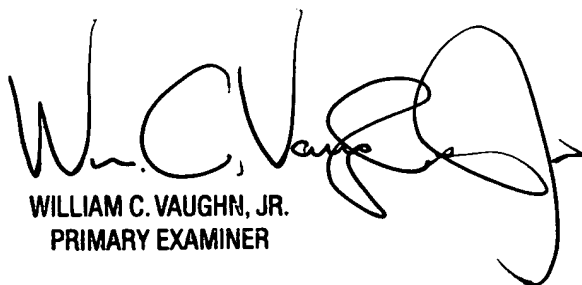## (13)   *Related Proceeding(s) Appendix*

No decision rendered by a court or the Board is identified by the examiner in the Related

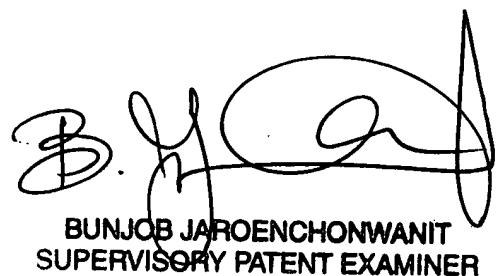Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Peling A Shaw

April 4, 2006

WILLIAM C. VAUGHN, JR.
PRIMARY EXAMINER

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER